

I claim:

1. A field serviceable limit switch with an alerter:
  - a base;
  - a housing supported on said base, said housing having a chamber therein;
  - 5 a cam shaft, said cam shaft rotationally supported by said housing, said cam shaft having a cam latch thereon;
  - a cam, said cam removable secured to said cam shaft by said cam latch;
  - an indicator, said indicator connected to said cam shaft for providing alert information;
  - 10 an interface device, said interface device removably supported by said housing;
  - an electrical terminal holder secured in said housing, said electrical terminal holder having a terminal holder latch;
  - an electrical terminal block, said terminal holder latch releasably securing said electrical terminal block to said terminal holder;
  - 15 a switch;
  - a switch holder, said switch holder secured in said housing, said switch holder having a switch holder latch thereon, said switch holder latch releasably securing said switch in said switch holder to facilitate replacement thereof; and
  - a wire guard, said wire guard shielding said cam shaft from rotational interference.
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2. The field service limit switch of claim 2 including a cover for securing to said housing.
3. The field serviceable limit switch of claim 2 including a set of latches on said  
25 housing for securing a cover to said housing.

4. The field serviceable limit switch of claim 1 wherein the switch holder is frictionally secured in said housing.
5. The field serviceable limit switch of claim 1 wherein the terminal block holder is frictionally secured in said housing.
6. The field serviceable limit switch of claim 1 wherein the indicator includes a region with a first marking and an adjacent region with a second marking with said second marking different from said first marking.
- 10 7. The field serviceable limit switch of claim 1 wherein the wire guard extends partially around said cam shaft.
8. The field serviceable limit switch of claim 1 wherein said cam includes a plurality of lobes for actuating the switch.
- 15 9. The field serviceable limit switch of claim 1 including a transparent dome for viewing the indicator therethrough.
- 20 10. A field serviceable limit switch comprising:  
a housing;  
an electrical switch removably mounted in said housing;  
a cam shaft removably and rotationally mounted in said housing, said cam shaft carrying a cam for activation of the electrical switch; and  
25 an indicator, said indicator connected to said cam shaft to provide a status indication in response to a rotation of said cam shaft.

11. The field service limit switch of claim 10 including a removable terminal block holder located in a chamber in said housing.
12. The field service limit switch of claim 11 including a removable terminal block  
5 mounted on said terminal block holder.
13. The field service limit switch of claim 12 including a wire guard extending at least partially around said cam shaft.
- 10 14. The field service limit switch of claim 10 wherein the cam is removable mounted on said cam shaft.
15. The field service limit switch of claim 10 including a transducer removably mounted in said housing for interfacing signals between a pneumatic device and an electrical  
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16. The field service limit switch of claim 10 including a set of latches secured to said housing for securing a cover to said housing.
17. The field service limit switch of claim 10 wherein the indicator comprises a rotatable  
20 disk like member.
18. The field service limit switch of claim 17 wherein a transparent shield cover the indicator to allow the indicator to be viewed from two mutually perpendicular directions.
- 25 19. The field service limit switch of claim 10 wherein the housing is plastic.
20. A field serviceable limit switch comprising:

- a housing;
- a cover for said housing;
- a cam shaft, said cam shaft rotationally mounted in said housing, said cam shaft carrying a cam; and
- 5 an indicator, said indicator connected to said cam shaft to provide a status indication in response to a rotation of said cam shaft with at least one of said cam shaft or said indicator field replaceable.
21. The field serviceable limit switch of claim 20 wherein the cam is latchable to said
- 10 cam shaft.
22. The field serviceable limit switch of claim 20 wherein the indicator is supported in a transparent indicator cover.
- 15 23. The field serviceable limit switch of claim 20 wherein the limit switch includes at least four different replaceable components.
24. The field serviceable limit switch of claim 20 including an electrical terminal block latchable to a terminal block holder.
- 20 25. The field serviceable limit switch of claim 24 wherein the terminal block holder is frictionally secured to said housing.
26. The field service limit switch of claim 20 wherein an electrical switch is confined in
- 25 a switch holder.
30. A field service limit switch comprising:

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a housing, said housing having a first frictional member for engaging a switch holder and a second frictional member for engaging a terminal block holder with said switch holder carrying replaceable electrical switches and said terminal block holder carrying a replaceable terminal block.

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31 The field service limit switch of claim 30 wherein the housing includes a set of snap latches for securing a cover to said housing.

32. The field serviceable limit switch of claim 31 wherein a finger removable terminal  
10 block, a finger removable cam and a finer removable electrical switch are located in a chamber in said housing.

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